

CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application

1. (Previously presented) A method for reducing artifacts in an incoming video stream, comprising the steps of:
decoding the video stream; and
adding random noise to at least one pixel in a picture in the video stream following decoding in an amount correlated to luminance information of at least a portion of a current picture using a factor dependent on the temporal correlation of the current picture image with one of a previously displayed or decoded picture and
increasing the added comfort noise in accordance with a quantization parameter representing quantization of the incoming video stream.

Claim 2 (previously cancelled).

3. (Previously presented) The method according to claim 1 wherein the correlation factor is established in accordance with one of a luma or color component.

4. (Original) The method according to claim 2 further comprising the step of adding noise to a color component of the picture in accordance with a luma component.

5. (Original) The method according to claim 2 wherein the correlation factor is first established on an $N \times N$ pixel picture block basis (where N is an integer) prior to interpolation of the additive noise.

6. (Original) The method according to claim 1 further comprising the step of adjusting the noise based on the intensity of an $N \times N$ block (where N is an integer) of adjacent pixels.

7. (Original) The method according to claim 1 wherein the amount of noise is correlated using an approximation of a Finite Impulse Response (IIR) filter.

8. (Previously presented) A decoder arrangement for decoding a coded video stream to yield reduced artifacts, comprising:

- a video decoder for decoding an incoming coded video stream to yield decoded pictures and for generating a quantization parameter representing quantization of the coded video stream;

- a reference picture store for storing at least one previously decoded picture for use by the decoder in decoding future pictures,

- a noise generator noise for generating random noise for addition to at least one pixel in a decoded picture in an amount correlated to correlated to luminance information of at least a portion of a current picture using a factor dependent on the temporal correlation of the current picture image with one of a previously displayed or decoded picture and increased in strength in accordance with an increase of the quantization parameter;

- a noise picture store for storing the noise information for subsequent use by the noise generator;

- a summing block for summing the noise generated by the noise generator with a decoded picture from the decoder; and

- a clipper for clipping the summed noise and decoded picture.

9. (Original) The decoder arrangement according to claim 8 wherein the noise generator implements an instantiation of a Finite Impulse Response filter.

10. (Original) The decoder arrangement according to claim 8 wherein the noise generator implements an approximation of an Infinite Impulse Response filter.

Claim 11 (previously cancelled).

Claim 12 (previously cancelled).

13. (Original) The decoder arrangement according to claim 8 further including a second picture store for storing an $N \times N$ pixel block picture average, where N is an integer, for use by the noise generator.

14. (Previously presented) A decoder arrangement for decoding a coded video stream to yield reduced artifacts, comprising:

- a video decoder for decoding an incoming coded video stream to yield decoded pictures and for generating a quantization parameter representing quantization of the coded video stream;

- a reference picture store for at least one storing at least one previously decoded picture for use by the decoder in decoding future pictures,

- a noise generator noise for generating noise in accordance with decoded pictures and bit stream information from the decoder for addition to at least one pixel in decoded in an amount correlated to additive noise of at least one pixel in a prior picture using a factor dependent on the temporal correlation of the current picture image with one of a previously displayed or decoded picture and increased in strength in accordance with an increase of the quantization parameter;

- a picture store for storing an $N \times N$ pixel block picture average, where N is an integer, for use by the noise generator; and

- a summing block for summing the noise generated by the noise generator with a decoded picture from the decoder.

15. (Previously presented) The decoder arrangement according to claim 14 wherein the noise generator implements an instantiation of a Finite Impulse Response filter.